

Title (en)

HEAT EXCHANGER AND AIR CONDITIONING DEVICE WITH SAME

Title (de)

WÄRMETAUSCHER UND DAMIT AUSGESTATTETE KLIMAANLAGE

Title (fr)

ÉCHANGEUR THERMIQUE ET DISPOSITIF DE CLIMATISATION LE COMPORTANT

Publication

EP 3699539 A1 20200826 (EN)

Application

EP 18869213 A 20181010

Priority

- JP 2017201545 A 20171018
- JP 2018037759 W 20181010

Abstract (en)

A heat exchanger (11) includes a plurality of flat pipes (63) and a header collecting pipe (70, 80). The header collecting pipe (70, 80) includes a flat pipe-side header forming member (91) to which the flat pipes (63) are inserted, and an opposite-side header forming member (92) that faces the flat pipe-side header forming member (91) and forms an internal space (70S, 80S) between the opposite-side header forming member and the flat pipe-side header forming member (91). The flat pipe-side header forming member (91) has a flat pipe-side curved portion (91a) protruding toward the flat pipes (63). The opposite-side header forming member (92) has an opposite-side curved portion (92a) protruding toward a side away from the flat pipes (63). The inner diameter of the opposite-side curved portion (92a) is smaller than the inner diameter of the flat pipe-side curved portion (91a).

IPC 8 full level

F28F 9/02 (2006.01); **F25B 39/00** (2006.01); **F28D 1/053** (2006.01); **F28F 1/02** (2006.01)

CPC (source: EP US)

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F28F 9/0207 (2013.01 - EP); **F28F 9/0212** (2013.01 - EP); **F28F 9/0224** (2013.01 - EP US); **F28F 9/0243** (2013.01 - EP);
F28F 9/0275 (2013.01 - EP); **F28F 9/028** (2013.01 - EP); **F28D 2021/0068** (2013.01 - EP); **F28F 2215/12** (2013.01 - EP);
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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3699539 A1 20200826; **EP 3699539 A4 20210623**; **EP 3699539 B1 20230614**; CN 111247386 A 20200605; CN 111247386 B 20211026;
EP 4220065 A1 20230802; JP 6888686 B2 20210616; JP WO2019078066 A1 20201022; US 11732971 B2 20230822;
US 12078427 B2 20240903; US 2021123684 A1 20210429; US 2023341189 A1 20231026; WO 2019078066 A1 20190425

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EP 18869213 A 20181010; CN 201880067444 A 20181010; EP 23170649 A 20181010; JP 2018037759 W 20181010;
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